

**REMARKS**

Claims 7-9 and 12-18 are pending. By this Amendment, Claims 7-9 and 12-13 are amended, and Claims 14-18 are added. Applicant respectfully submits no new material is presented herein.

**Objections to the Claims**

Claims 7-9 are amended to correct the minor informalities therein. Accordingly, Applicant respectfully requests withdrawal of the objections.

**The Specification**

The Specification is amended to replace the Title with a substitute Title responsive to the objection thereto. Applicant respectfully requests withdrawal of the objection.

**The Abstract**

A Substitute Abstract replaces the pending Abstract, responsive to the objection thereto. Applicant respectfully requests withdrawal of the objection.

**Claims Rejected—35 U.S.C. § 103**

Claims 7-9 and 12-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable by U.S. Patent No. 3,359,495 issued to McMaster, et al, (hereinafter referred to as "McMaster '495") in view of U.S. Patent No. 4,449,081 issued to Doemen (hereinafter referred to as "Doemen '081").

Claim 7 recites a method to compensate for temperature dependence of a measuring device including, among other steps, receiving a temperature signal corresponding to the internal resistance of a magnetic sensor element; determining a correction factor using the temperature signal and temperature coefficients of the

magnetic sensor element; and correcting an output signal of the magnetic sensor element using the correction factor.

McMaster '495 discloses a device for measuring a coating thickness using a magnetic sensor element 23. However, McMaster '495 does not disclose or suggest determining a correction factor using a temperature signal and temperature coefficients of the magnetic sensor element or correcting an output signal of the magnetic sensor element using the correction factor. Moreover, the Office Action admits McMaster '495 fails to disclose or suggest compensating a signal of the measuring device for changes in temperature. See page 3, lines 9-10 of the Office Action.

Doemen '081 teaches a circuit having an operational amplifier 2, an external resistor  $R_F$ , and a Hall generator or magnetic sensor element 1, wherein the external resistor  $R_F$  has a much larger resistance than an internal resistance  $R_H$  of the magnetic sensor element 1. See col. 3, line 31 and Figure 1 of Doemen '081.

However, contrary to the Office Action's assertion, Doemen '081 does not teach or suggest determining a correction factor using a temperature signal corresponding to an internal resistance of the magnetic sensor element and temperature coefficients of the magnetic sensor element, as recited in Claim 7. Rather, Doemen '081 merely discloses using the operational amplifier 2 and the external resistor  $R_F$  to limit changes in the output voltage  $V_O$  caused by changes in temperature. Accordingly, the device of Doemen '081 does not determine anything. Therefore, McMaster '495 and Doemen '081, either alone or in combination, do not teach or suggest each and every feature recited in Claim 7.

To establish *prima facie* obviousness, each feature of the rejected claim must be taught or suggested by the prior art of record. See M.P.E.P. § 2143.03. Therefore, as

explained above, because both McMaster '495 and Doemen '081, either alone or in combination, do not teach or suggest each and every feature recited in Claim 7, Applicant respectfully submits that the Office Action has failed to establish *prima facie* obviousness. Accordingly, Applicant respectfully submits that Claim 7 should be deemed allowable.

Claims 8-9 and 12-18 depend from Claim 7. Therefore, Applicant respectfully submits Claims 8-9 and 12-18 should be deemed allowable for the same reasons Claim 7 is allowable, as well as for the additional subject matter recited therein.

Accordingly, Applicant respectfully requests withdrawal of this rejection.

**Conclusion**

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding objections and rejection, allowance of Claims 7-9 and 12-18, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 101749-00007**.

Respectfully submitted,  
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